Claim Amendments

Claim 1 (currently amended): A method for analyzing a ~~human~~ cell having an average ~~straight line velocity of between 0 and 10 μm/min~~ curvilinear velocity of less than 8 μm/min by suppressing movement of the ~~human~~ cell caused by other than activity of the ~~human~~ cell itself comprising the steps of:

placing the ~~human~~ cell having an average ~~straight line velocity of between 0 and 10 μm/min~~ curvilinear velocity of less than 8 μm/min in a solution containing a viscosity enhancement medium; and

measuring the motility of the ~~human~~ cell in the solution.

Claim 2 (original): A method as described in Claim 1 wherein the viscosity enhancement medium is methyl cellulose.

Claim 3 (previously presented): A method as described in Claim 1 wherein the viscosity enhancement medium is hyaluronic acid or chondroitin sulfate or cellulose ester or polysaccharide.

Claim 4 (original): A method as described in Claim 1 wherein multiple cells are measured in parallel.

Claim 5 (original): A method as described in Claim 1 wherein the placing step includes the step of placing the cell in the solution of between 0.1% to 0.2% by total volume of methyl cellulose for 2D analysis of motility.

Claim 6 (original): A method as described in Claim 2 wherein the placing step includes the step of placing the methyl cellulose solution having a concentration of between 0.1% and 1.2% methyl cellulose onto cells in culture medium to provide a layer of methyl cellulose-containing medium for 2D analysis of motility.

Claim 7 (original): A method as described in Claim 6 wherein the placing step includes the step of placing the cell in the solution having a viscosity of 100-5000 centipoise.

Claim 8 (original): A method as described in Claim 1 wherein the placing step includes the step of placing cells in solution having a concentration of between 0.3% to 2.5% weight per volume methyl cellulose for analysis of motility in 3D.

Claim 9 (currently amended): A method for analyzing a ~~human~~ cell by suppressing movement of the ~~human~~ cell caused by other than activity of the ~~human~~ cell itself comprising the steps of:

placing the cell having an average ~~straight line velocity of between 0 and 10 μm/min~~ curvilinear velocity of less than 8 μm/min in a solution; and

measuring the motility of the ~~human~~ cell in the solution when there is no attachment of the cell to any surface ~~of the cell~~ involved.

Claim 10 (canceled)

Claim 11 (currently amended): A method for analyzing a ~~human~~ cell comprising the steps of:

placing the ~~human~~ cell having an average ~~straight line velocity of between 0 and 10 μm/min~~ curvilinear velocity of less than 8 μm/min in a solution having a viscosity of about 100-5000 centipoise; and

performing two-dimensional or three-dimensional migration analysis on the cell in the solution.

Claim 12 (currently amended): A method for analyzing a cell comprising the steps of:

placing the cell in a solution having a viscosity of about 100-5000 centipoise; and

analyzing migration of the cell in the solution which occurs without adherence of the cell to any surface.

Claims 13-15 (canceled)

Claim 16 (original): A method as described in Claim 1 wherein the placing step includes the step of placing the cell in the solution of between 1% to 5% by total volume of methyl cellulose and a concentration of between 0.08% and 0.12% of methyl cellulose.

Claim 17 (currently amended): A method for analyzing a ~~human~~ cell comprising the steps of:

placing the ~~human~~ cell having an average ~~straight line velocity of between 0 and 10 μm/min~~ curvilinear velocity of less than 8 μm/min in a solution having a viscosity of about 100-5000 centipoise; and

measuring motility of the cell in the solution, where surface attachment by the cell to any surface is not utilized.

Claims 18-22 (canceled)

Claim 23 (currently amended): A method for analyzing a ~~human~~ cell by suppressing movement of the ~~human~~ cell caused by other than activity of the ~~human~~ cell itself comprising the steps of:

placing the human cell having an average ~~straight line velocity of between 0 and 10 μm/min~~ curvilinear velocity of less than 8 μm/min in a solution; and

placing methyl cellulose in the solution to reduce ambient motion of the ~~human~~ cell in the solution and eliminate convective motion.

Claim 24 (canceled)

Claim 25 (currently amended): A method for analyzing a ~~human~~ cell having a velocity of less than 50 μm/min by suppressing movement of the ~~human~~ cell relative to its location on a plate caused by forces other than ~~activity of the human~~ those generated by the cell itself comprising the steps of:

placing the ~~human~~ cell in a solution; and

using methyl cellulose in the solution for suppressing a tendency for the cell to move downward on sloped surfaces of a plate holding the solution in which the cell is disposed ~~stopping the effects of gravity on the human cell in the solution~~.

Claim 26 (currently amended): A method for analyzing a ~~human~~ cell by suppressing movement of the ~~human~~ cell caused by other than activity of the ~~human~~ cell itself comprising the steps of:

placing the ~~human~~ cell having an average ~~straight line velocity of between 0 and 10 μm/min~~ curvilinear velocity of less than 8 μm/min in a solution; and

using methyl cellulose in the solution for reducing or eliminating the effects of micro-turbulances due to thermal convection in the solution.

Claim 27 (currently amended): A method for analyzing a ~~human~~ cell comprising the steps of:

placing the ~~human~~ cell having an average ~~straight line velocity of between 0 and 10 μm/min~~ curvilinear velocity of less than 8 μm/min in a solution; and

introducing methyl cellulose in the solution for stopping motion of the ~~cells~~ cell due to movement of the solution induced by mechanical movement of a plate on which the cells are disposed.

Claim 28 (currently amended): A method for analyzing a ~~human~~ cell comprising the steps of:

placing the ~~human~~ cell having an average ~~straight line velocity of between 0 and 10 μm/min~~ curvilinear velocity of less than 8 μm/min in a solution; and

introducing a viscous fluid having a viscosity of about 100-5000 centipoise in the solution for stopping or reducing the effects of gravity on the cell.

Claim 29 (currently amended): A method for analyzing a ~~human~~ cell comprising the steps of:

placing the ~~human~~ cell having an average ~~straight line velocity of between 0 and 10 μm/min~~ curvilinear velocity of less than 8 μm/min in a solution; and

introducing a viscous fluid having a viscosity of about 100-5000 centipoise in the solution for reducing the effects of micro-turbulences due to thermal convection.

Claim 30 (currently amended): A method for analyzing a ~~human~~ cell comprising the steps of:

placing the cell in a solution; and

introducing a viscous fluid having a viscosity of about 100-5000 centipoise in the solution for stopping motion of the ~~cells~~ cell due to effects on the cell of currents in the solution that are induced by motion of a ~~mechanical movement of the~~ plate on which the cell is disposed.

Claim 31 (currently amended): A method for analyzing a ~~human~~ cell by suppressing movement of the ~~human~~ cell caused by other than activity of the ~~human~~ cell itself comprising the steps of:

placing the ~~human~~ cell having an average ~~straight line velocity of between 0 and 10 μm/min~~ curvilinear velocity of less than 8 μm/min in a solution; and

using methyl cellulose or any viscous fluid to separate biological motility from ambient motility.

Claims 32-37 (canceled)

Claim 38 (previously presented): A method for analyzing either a T-cell, dendritic cell, B-cell or lymphocyte having an average straight line velocity of between 0 and 10 μm/min by suppressing movement of either a T-cell, dendritic cell, B-cell or lymphocyte caused by other than activity of either a T-cell, dendritic cell, B-cell or lymphocyte itself comprising the steps of:

placing either a T-cell, dendritic cell, B-cell or lymphocyte having an average straight line velocity of between 0 and 10 μm/min in a solution containing a viscosity enhancement medium; and

measuring the motility of either a T-cell, dendritic cell, B-cell or lymphocyte in the solution.